

Amendments to the Claims

The following listing of claims replaces all prior versions and listings of claims in the present application:

1. (Currently Amended) An apparatus having at least four respective valves disposed therein for controlling {the} respiration of a controlled body, comprising:

a first circuit having an end adapted to be connected to said controlled body and an opposite end connected to the outside of the apparatus;

two respective valves disposed independently in said first circuit, said respective valves comprising:

a first check valve disposed in said first circuit for allowing said controlled body to inhale from said outside through said first circuit and preventing exhaled air from said controlled body from flowing into said first circuit; and

a first solenoid-operated valve disposed in said first circuit for selectively connecting and disconnecting a respiratory system of said controlled body to and from said outside;

a second circuit having an end adapted to be connected to said controlled body and an opposite end connected to said outside;

two other respective valves disposed independently in said second circuit, said other respective valves comprising:

a second check valve disposed in said second circuit for allowing said controlled body to exhale to the outside through said second circuit and preventing said controlled body from inhaling through said second circuit;

a second solenoid-operated valve disposed in said second circuit for selectively connecting and disconnecting the respiratory system of said controlled body to and from said outside; and

{a controller} control means for controlling said first solenoid-operated valve and said second solenoid-operated valve at a predetermined time in a respiratory cycle thereby to disconnect the respiratory system of said controlled body from said outside, and for controlling said first solenoid-operated valve and said second solenoid-operated valve after elapse of a predetermined period from said predetermined time thereby to connect the respiratory system of said controlled body to said outside.

2. (Currently Amended) An apparatus according to claim 1, further comprising:

a timer circuit for starting to measure time when said first solenoid-operated valve and said second solenoid-operated valve have started to disconnect the respiratory system of said controlled body from said outside, and outputting a time measuring cycle end signal after elapse of a predetermined period from starting to measure time; and

a solenoid-operated valve controller responsive to said time measuring cycle end signal, for controlling said first solenoid-operated valve and said second solenoid-operated valve, independently of said {controller} control means, to connect the respiratory system of said controlled body to said outside.

3. (Currently Amended) An apparatus according to claim 1, further comprising:

a pressure detector for detecting when an exhaling pressure in said second circuit reaches a predetermined pressure and outputting a detected pressure signal; and

a solenoid-operated valve controller responsive to said detected pressure signal, for controlling said first solenoid-operated valve and said second solenoid-operated valve, independently of said {controller} control means, to connect the respiratory system of said controlled body to said outside.

4. (Currently Amended) An apparatus according to claim 1, further comprising:

an open switch for outputting an open signal when operated; and

a solenoid-operated valve controller responsive to said open signal, for controlling said first solenoid-operated valve and said second solenoid-operated valve, independently of said {controller} control means, to connect the respiratory system of said controlled body to said outside.

5. (Original) An apparatus according to claim 1, further comprising:

a vent valve disposed in said second circuit, for connecting said second circuit to said outside in the presence of a predetermined exhaling pressure or higher in said second circuit.

6. (Original) An apparatus according to claim 1, wherein said first solenoid-operated valve and said second solenoid-operated valve connect the respiratory system of said controlled body to said outside when said first solenoid-operated valve and said second solenoid-operated valve are de-energized.

7. (Currently Amended) An apparatus according to claim 1, further comprising:

an audio output unit for announcing the progress of a respiration control cycle of said {controller} control means by voice.

8. (Currently Amended) An apparatus according to claim 1, further comprising:

a flow rate sensor for detecting a respiratory state of said controlled {object} body as an air flow rate, said flow rate sensor being connected between said first circuit and said second circuit {,} and said controlled body;

said {controller} control means comprising means for controlling said first solenoid-operated valve and said second solenoid-operated valve based on said detected air flow rate.

9. (Original) An apparatus according to claim 1, further comprising:

    a filter for removing bacteria, said filter being connected between said first circuit and said controlled body.

10. (Original) An apparatus according to claim 1, wherein said second circuit includes a dehumidifying chamber for dehumidifying exhaled air from said controlled body.

11. (Original) An apparatus according to claim 10, wherein said dehumidifying chamber houses a silica gel therein.